

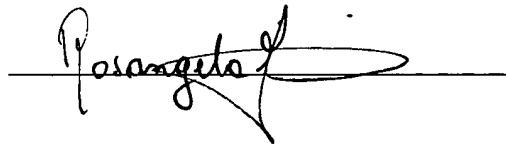
CERTIFICATE OF ACCURACY

STATE OF COLORADO) SS: 84-1205131
COUNTY OF BOULDER)

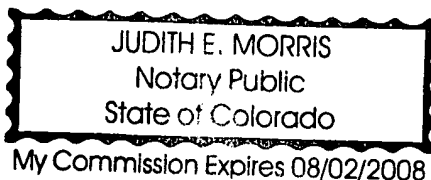
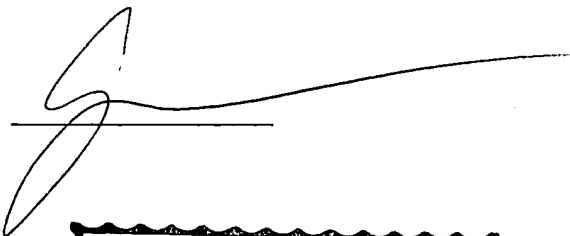
ROSANGELA FIORI being duly sworn, deposes and says that she is the Manager of
LANGUAGE MATTERS, 1445 Pearl Street, Boulder, CO 80302 and that she is thoroughly
familiar with **RICHARD VAN EMBURGH**, who translated the attached document titled:

ELECTROMECHANICAL LOCK CYLINDER - NEW CLAIMS

from the **GERMAN** language into the **ENGLISH** language, and that the **ENGLISH** text is a true
and correct translation of the copy to the best of her knowledge and belief.



Sworn before me this
December 9, 2005



Electromechanical Lock Cylinder

new claims

1. Electromechanical lock cylinder that cooperates with evaluation electronics to recognize access authorization and has a housing that includes two opposite cylindrical receptacles, in which either a lock core, which can be operated by a key, or a knob shaft (11), which is connected to rotate in unison with a knob, are mounted to rotate, in which the lock cores or knob shafts cooperate with a lock tab (13), which operates, in particular, a bolt or a latch of a door lock, and, with a fitting key or access authorization, an electromechanically driven blocking or coupling element (14) is moved from the rest position to an operating position and produces a splined connection between the key or knob and the lock tab, whereas the lock tab (13), in the rest position of the blocking or coupling element, is freely rotatable relative to the two lock cores or the two knob shafts, characterized by the fact that the blocking or coupling element (14) is arranged on or in the lock core or on or in the knob shaft (11) and rotates with it, and includes an electric motor drive (23) with an eccentric (15, 16), which moves a driver (19) back and forth between the rest position and the operating position, in which it engages in a recess (28) of the lock tab (13) or rotary sleeve (35), on which the lock tab is arranged.

2. Lock cylinder according to Claim 1, characterized by the fact that a continuous lock core or continuous knob shaft is present, which extends from one side of the housing to the opposite side and can be operated from both sides by a key or rotated by a knob.

3. Electromechanical lock cylinder, which cooperates with evaluation electronics to recognize access authorization and has a housing that includes two opposite cylindrical receptacles, in which, on one side of the housing, a lock core, which can be operated by a key, and, on the opposite side, a knob shaft (11), which is connected to rotate in unison with a knob, are mounted to rotate, in which the lock core and/or knob shaft cooperate with a lock tab (13), and especially operate a bolt or latch of a door lock, and with a fitting key and/or access authorization, an electromechanically driven blocking or coupling element (14) is moved from the rest position to an operating position and produces a splined connection between the key and/or knob and the lock tab, whereas the

lock tab (13), in the rest position of the blocking or coupling element, is freely rotatable relative to the lock core (11) in the knob shaft, characterized by the fact that the blocking or coupling element (14) is arranged on or in the lock core or on or in the knob shaft (11) and rotates with it, and also includes an electric motor drive (23) with an eccentric (15, 16), which moves a driver (19) back and forth between the rest position and the operating position, in which it engages in a recess (28) of the lock tab (13) or a rotary sleeve (35), on which the lock tab is arranged.

4. Electromechanical lock cylinder according to Claim 3, characterized by the fact that the lock core and knob shaft are connected to rotate in unison with each other or made in one piece.

5. Electromechanical lock cylinder, which cooperates with evaluation electronics to recognize an access authorization and has a housing, which includes a cylindrical receptacle, in which either a lock core, which can be operated by a key, or a knob shaft (11), which is connected to rotate in unison with a knob, are mounted to rotate, in which the lock core or the knob shaft cooperate with a lock tab (13), which operates, in particular, a bolt or latch of a door lock, and, with a fitting key and/or access authorization, electromechanically driven blocking or coupling element (14) is moved from the rest position to an operating position and produces a splined connection between the key or knob and the lock tab, whereas the lock tab (13), in the rest position of the blocking or coupling element, is freely rotatable relative to the lock core or to the knob shaft, characterized by the fact that the blocking or coupling element (14) is arranged on or in the lock core or on or in the knob shaft (11) and rotates with it, and also includes an electric motor drive (23) with eccentric (15, 16), which moves a driver (19) back and forth between the rest position and the operating position, in which it engages in a recess (28) of the lock tab (13) or a rotary sleeve (35), on which the lock tab is arranged.

6. Lock cylinder according to one of the Claims 1 to 5, characterized by the fact that the rest position and/or the operating position of the driver (19) lie beyond the corresponding dead centers of the eccentric (15, 16) by a predeterminable angle of rotation.

7. Lock cylinder according to Claim 6, characterized by the fact that the angle of rotation is 10° to 30° beyond the corresponding dead center.

8. Lock cylinder according to one of the Claims 1 to 7, characterized by the fact that the eccentric has a pin (16) arranged eccentrically around motor shaft (17), which engages in a groove (18) extending across the lift movement of driver (19) and perpendicular to the motor shaft, whose position and length are dimensioned, so that a rotary movement from the rest position into the operating position is only possible in one direction of rotation, and the rotational movement (21) from the operating position into the rest position of the driver is only possible in the opposite direction of rotation (22).

9. Lock cylinder according to Claim 8, characterized by the fact that the length and position of the groove (18) are chosen, in order to permit further rotation of the eccentric from the rest position of the operating position of the driver beyond the dead center by the angle of rotation and vice versa.

10. Lock cylinder according to one of the Claims 1 to 9, characterized by the fact that the driver includes a slide (24), whose free end (25) is guided in the sleeve (26), whose free end (27) enters the recess (28) of the lock tab (13) or rotary sleeve, and in whose interior a compression spring (29) is arranged, which cooperates with the free end of the pin.

11. Lock cylinder according to Claim 10, characterized by the fact that the sleeve, on its side opposite the free end, has a stop (30), against which the thickened end (25) of the slide (24) stops.

12. Lock cylinder according to one of the Claims 11 or 12, characterized by the fact that the depth of the recess (28) of the lock tab or the rotary sleeve is dimensioned, so that when the driver is engaged, the compression spring (29) in the sleeve is still under tension.

13. Lock cylinder according to one of the Claims 1 to 12, characterized by the fact that the driver, in the rest position, is held by spring force.

14. Lock cylinder according to one of the Claims 1 to 13, characterized by the fact that recording devices (36) are present to record the position of the coupling element.

15. Lock cylinder according to Claim 14, characterized by the fact that recording devices include at least one hall sensor (37) and/or at least one capacitive or conductive sensor (38) or a switch (39), which cooperates with a moving element of the coupling element.

16. Lock cylinder according to Claim 15, characterized by the fact that the recording devices (36) cooperate with the driver (19).

17. Lock cylinder according to Claim 15, characterized by the fact that the recording devices (36) record the position of the eccentric or the motor shaft.

18. Lock cylinder according to one of the Claims 14 to 17, characterized by the fact that the recording devices generate at least one signal, and preferably a sequence of signals, in order to move the coupling element into the rest position, as long as the coupling element is in the operating position or still not in the rest position, and if the rest position is to be assumed.